

ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

1100.127D

11/05/01

**SUBJ: AIRWAY FACILITIES REGIONAL OFFICE AND SYSTEM MANAGEMENT OFFICE
ORGANIZATIONAL STRUCTURE AND FUNCTIONS**

- 1. PURPOSE.** This order prescribes the Federal Aviation Administration (FAA) standard organizational structure and functions of the regional Airway Facilities (AF) Division offices, including regional office staff, branches, System Management Offices (SMO) and Operations Control Centers (OCC) reflecting the straightlined AF field organization.
- 2. DISTRIBUTION.** This order is distributed to the director level in the Office of Budget, Office of Personnel, Office of Acquisitions, Offices of Aviation Policy and Plans, and Office of International Aviation, and Air Traffic Service, to the division level in Airway Facilities Service, Technical Center and the Aeronautical Center; to the Regional Administrators; to the branch level in the regional Airway Facilities and Logistics divisions; and to all AF field offices with a standard distribution.
- 3. CANCELLATION.** Order 1100.127C, Airway Facilities Sector Configuration, dated May 22, 1991, and Order 1100.158, Standard Regional Airway Facilities Divisions, dated October 21, 1992, are canceled.
- 4. BACKGROUND.**
 - a. The first Airway Facilities Strategic Plan was published in 1992. The transition to the new AF organizational structure was implemented between 1995 and 1998. The intent of the new organizational structure was to optimize the use of available resources while streamlining the organization. This was done by increasing the percentage of "hands-on" personnel, reducing management layers, and consolidating staff positions, while seeking opportunities to continuously improve service to our customer and ensure that the AF organization continued to focus on maintaining a safe National Airspace System (NAS).
 - b. Some labor-intensive systems were replaced by new technologies. The role of AF is changing from one of systems, sub-systems, and equipment maintenance to one of service management. Under this concept, the workforce requires new skills and business processes which are constantly being updated in order to stay effective.
 - c. GNAS Maintenance Control Centers (GMCC) transitioned into Operations Control Centers (OCC) located in Atlanta, Kansas City, and San Diego. Air Route Traffic Control Center, ARTCC/ Large Terminal Radar Approach Control (TRACON) Maintenance Control Centers (MCCs) ARTCC Maintenance Control Center (AMCC) transitioned to Service Operations Centers (SOC).

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A-X-1; A-YZ-2; A-X(AF/LG)-3; A-FAF-2/3/7(STD)

d. Regional Facilities and Equipment (F&E) organizations (formerly AXX-450) were reorganized under a single National Field Office, called the NAS Implementation Program Directorate (ANI). Former AXX-450 branches are now called NAS Implementation Centers (ANI-100 thru 900), each located within one of the nine regional boundaries. The Implementation Center (IC) Managers report directly to ANI-1. The Program Director, ANI-1, is a member of the AF Management Team and reports directly to the Director of Airway Facilities, AAF-1.

5. EXPLANATION OF CHANGES. This revision reflects changes to regional and field organizational structures and functions.

a. During realignment, all regions have decreased the number of organizational levels below Washington Airway Facilities Headquarters. These organization levels are:

(1) Regional Office (RO).

(2) System Management Office (SMO).

(3) Facility Managers at select locations approved by the Director of Airway Facilities, AAF-1.

(4) Service Operations Center (SOC) at ARTCCs and selected Large TRACONs.

(5) System Support Center (SSC).

b. Operations Control Centers (OCC) have been established in the Southern, Central and Western Pacific Regions.

c. NAS Implementation Program (ANI) established as a National Field organization.

d. RO functional responsibilities and structure are standardized around no more than one staff and two branches. These organizations are:

(1) Executive Staff, AXX-410 (formerly the Division Staff).

(2) Resource Management Branch, AXX-420 (formerly the Resource and Planning Branch).

(3) Operations Branch, AXX-470 (consolidated the former Maintenance Engineering Branch, AXX-460, and former Telecommunications Management and Spectrum Engineering Branch, AXX-480).

e. Former AF Sector Offices have been consolidated into SMOs.

(1) Former Sector Field Offices (both first and second levels), Sector Field Units, and other units have been consolidated into SSC's.

(2) Field engineering functional responsibility is transferred from the SMOs to the Operations Branch, AXX-470. Each SMO may retain sufficient engineering positions to support the NAS and Improve FAA Buildings and Equipment (IFBE) programs.

6. ORGANIZATION. The organizational structure will be configured to provide optimum NAS services to the users in the most cost effective and efficient manner. The success of the organization will be measured through cost accounting and NAS performance results.

a. The Branch, SMO, and OCC supervisory ratios shall provide adequate quality assurance oversight and management of agency assets and personnel. As a result of workload efficiencies, AF will continue to increase its supervisory ratio and provide more direct safety related positions for operation of the NAS.

b. Direct Safety Related (DSR) work is defined as any work or function which is directly related to or providing technical support for maintenance/operation of NAS systems, sub-systems, services or equipment. The key to identifying DSR work is if the subject position has assigned maintenance/operation, restoration, and certification responsibility.

c. Overhead is defined as any work or functions that are not directly related to or providing technical support for maintenance/operation, restoration of NAS systems, sub-systems, services or equipment. The SMO/OCC organization should reflect a limit of approximately 22 percent overhead positions. Overhead percentage is calculated by dividing the number of overhead FTP positions by the total number of FTP positions. Overhead positions are:

(1) All regional office positions.

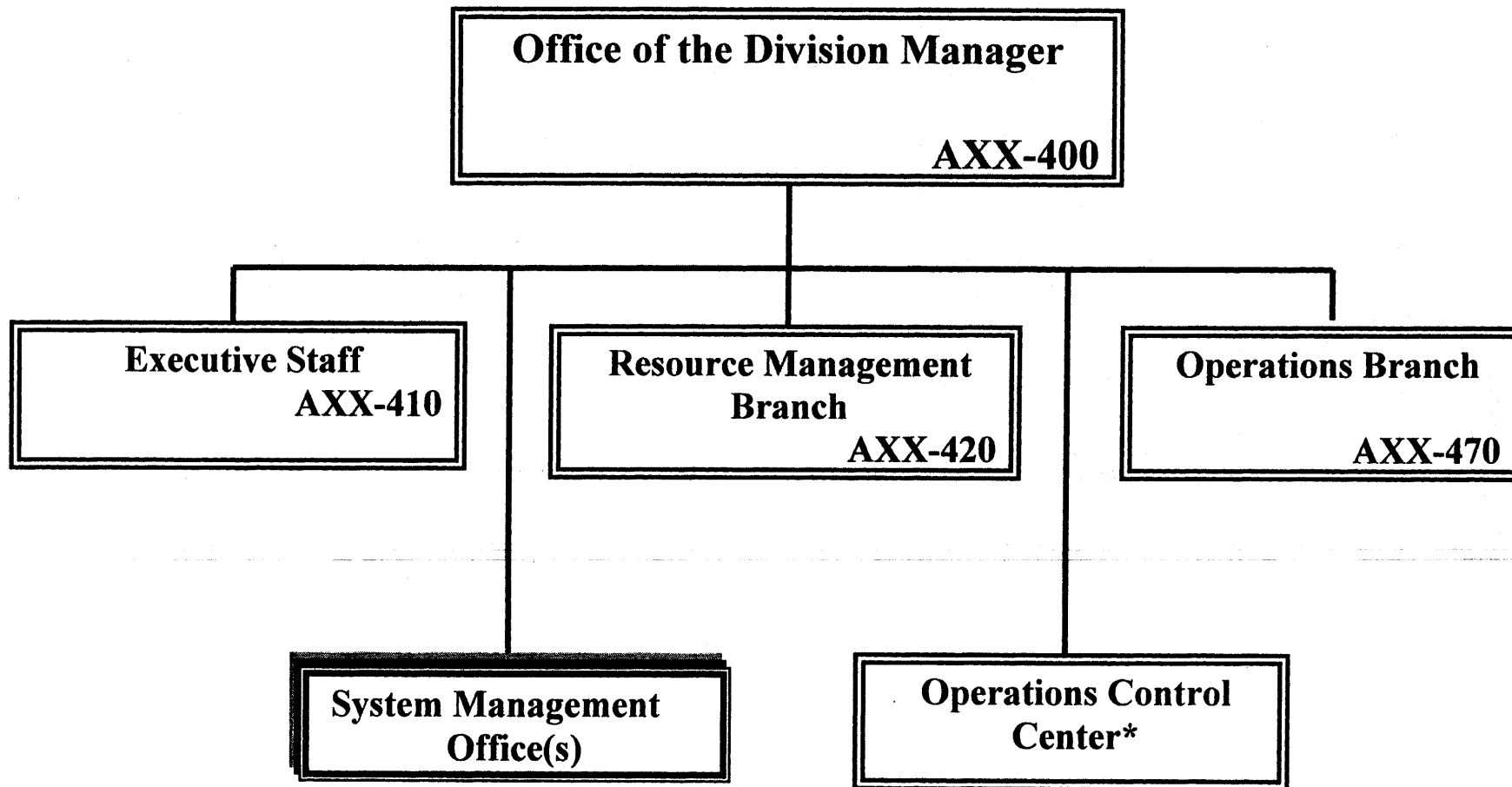
(2) All SMO headquarters positions except Technical Support Staff in the FV-2101 series and assigned direct safety related workload on NAS systems, sub-systems, services, and equipment.

(3) All field managers, supervisors, engineers, administrative, clerical, program management, and logistics positions.

d. Regional AF Division structure and functions shall be designed, in accordance with Figure 1, Standard Airway Facilities Division; Figure 2, Standard Regional Office Organizational Structure and Functions; Figures 3 and 4, Standard Airway Facilities System Management Office (SMO); Figures 5 and 6, Standard OCC Office Structure and Functions. They shall be compatible with established national position classification; national labor agreements; career progression, development and training programs; the principles of sound position management; and rapidly changing technology and systems.

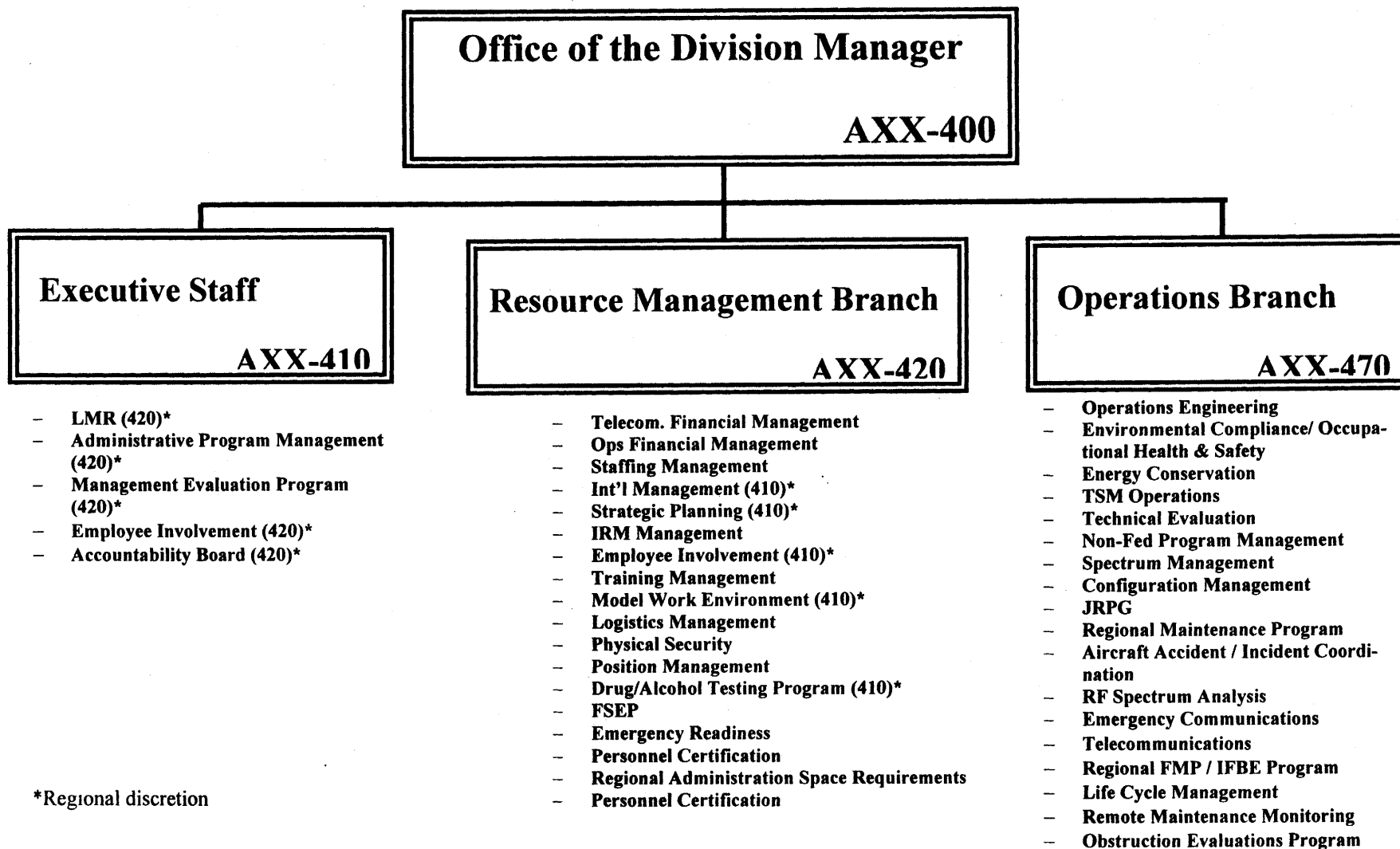
e. The organizations in this order are considered the standard regional AF Division Organization. Waivers to the standard organizational structure and functions will be submitted through Resources Management Director, AFZ-1, to the Director of Airway Facilities, AAF-1, for approval/disapproval.

FIGURE 1. STANDARD AIRWAY FACILITIES DIVISION

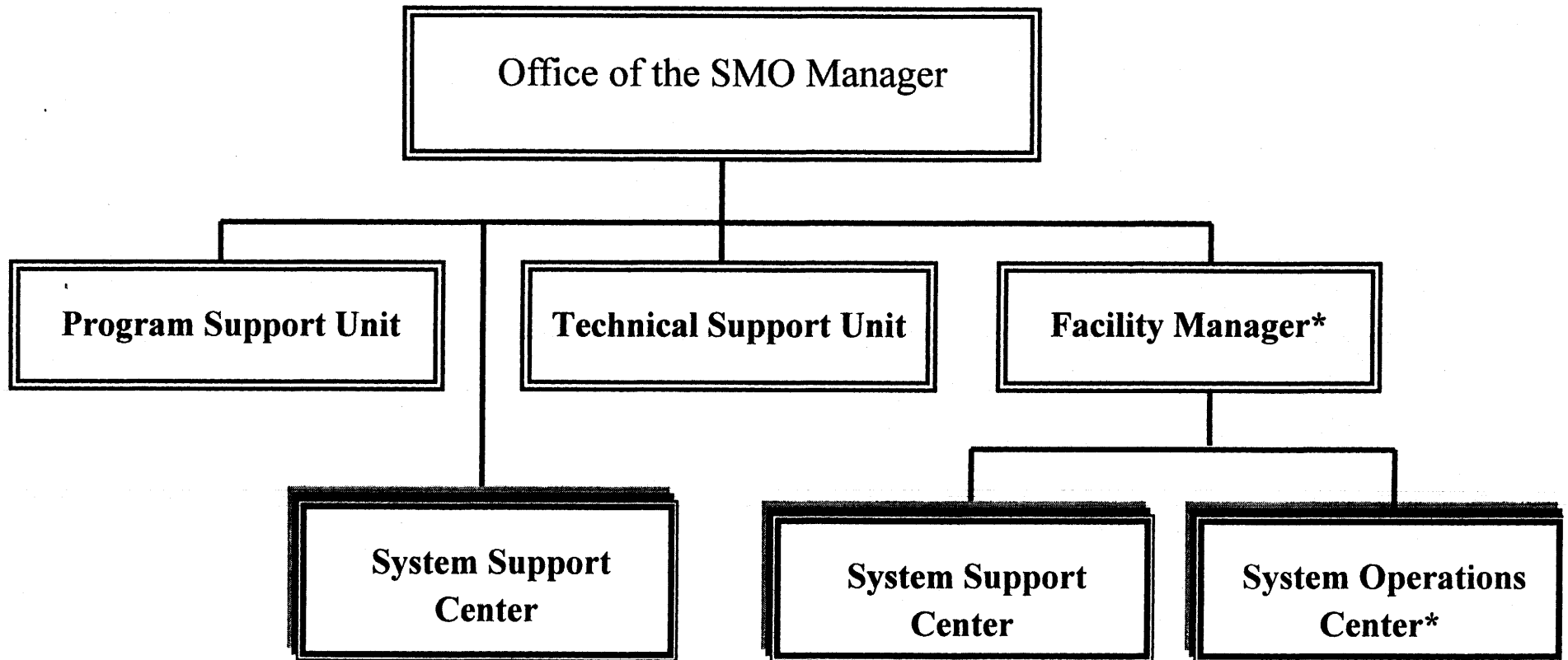


*Applicable to ASO, ACE, and AWP

FIGURE 2. STANDARD REGIONAL OFFICE ORGANIZATIONAL STRUCTURE AND FUNCTIONS



**FIGURE 3. STANDARD AIRWAY FACILITIES SYSTEM
MANAGEMENT OFFICE**



*Where applicable

**FIGURE 4. STANDARD AIRWAY FACILITIES SYSTEM
MANAGEMENT OFFICE STRUCTURE AND FUNCTIONS**

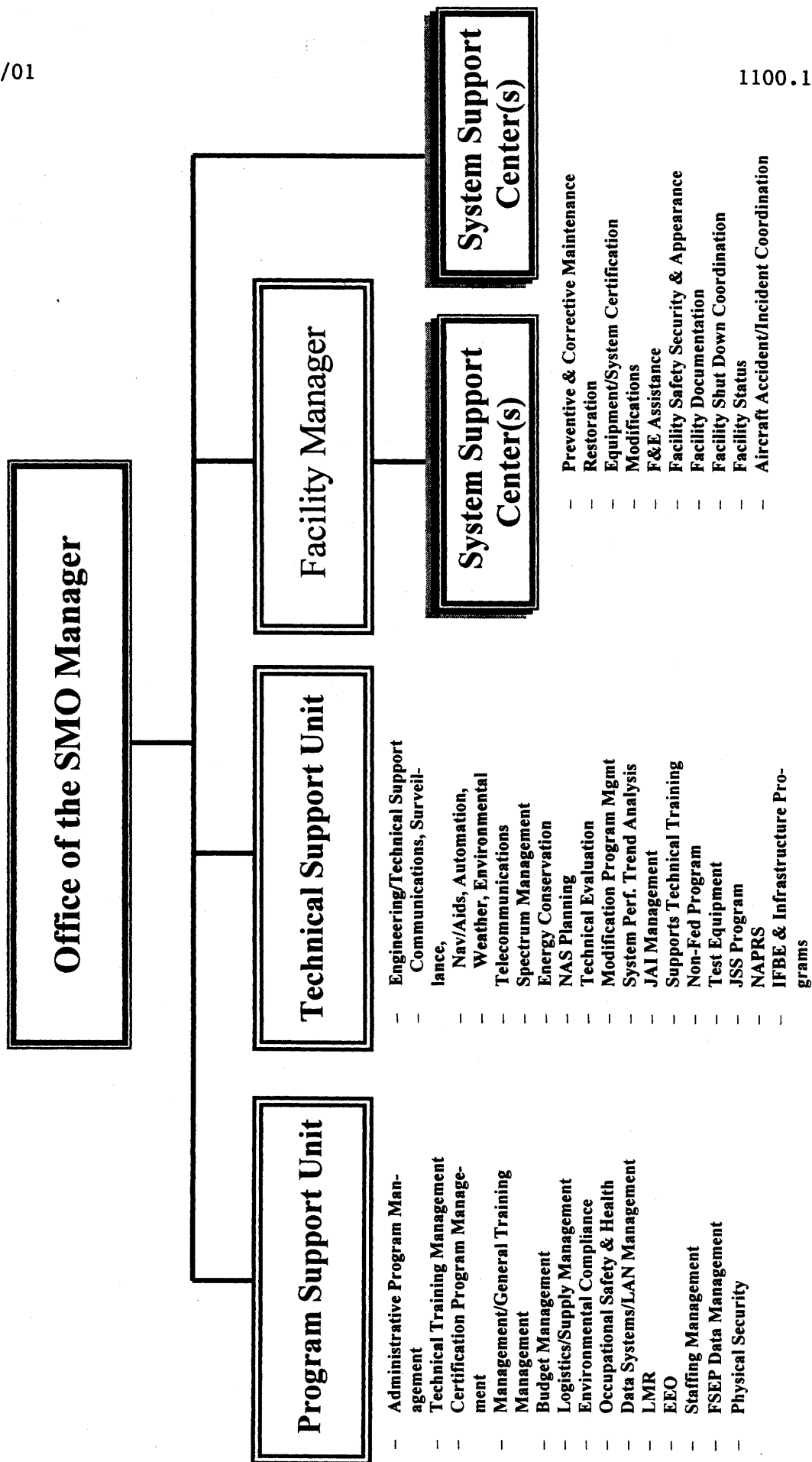
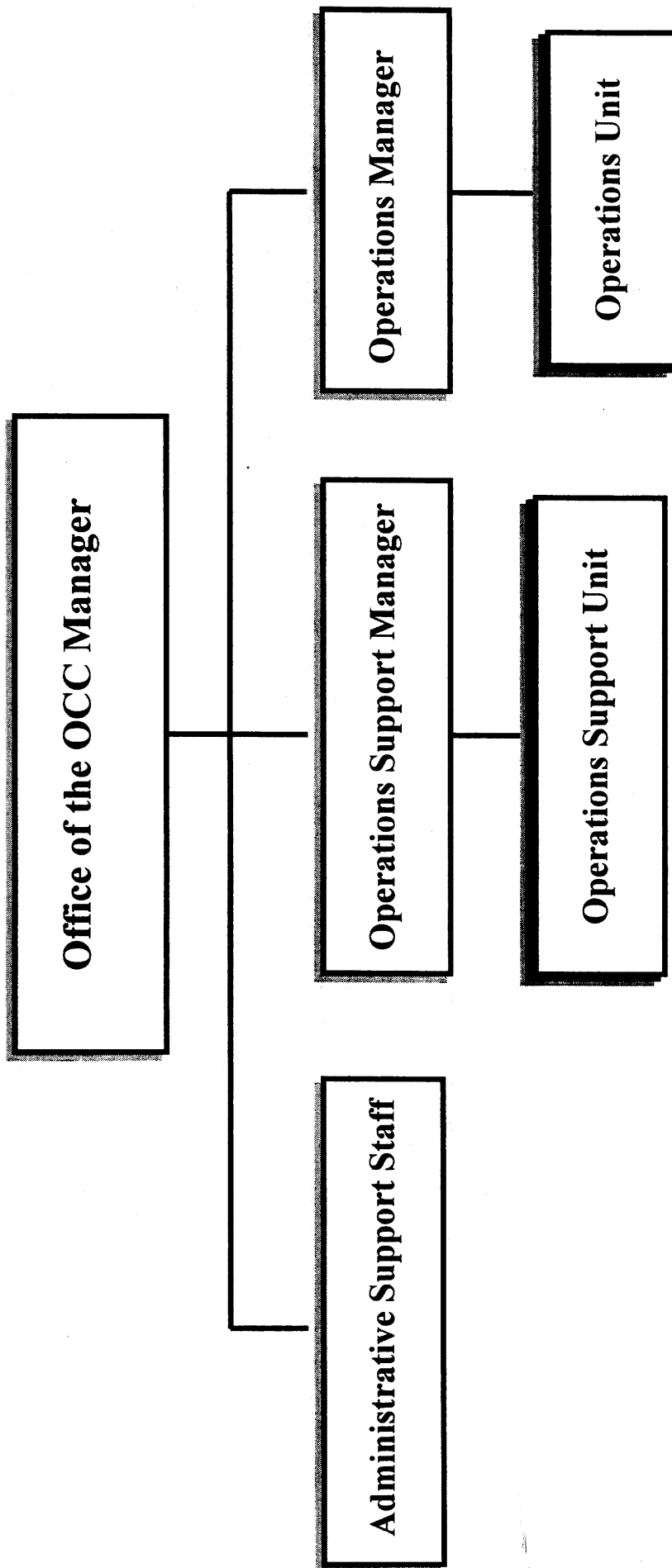
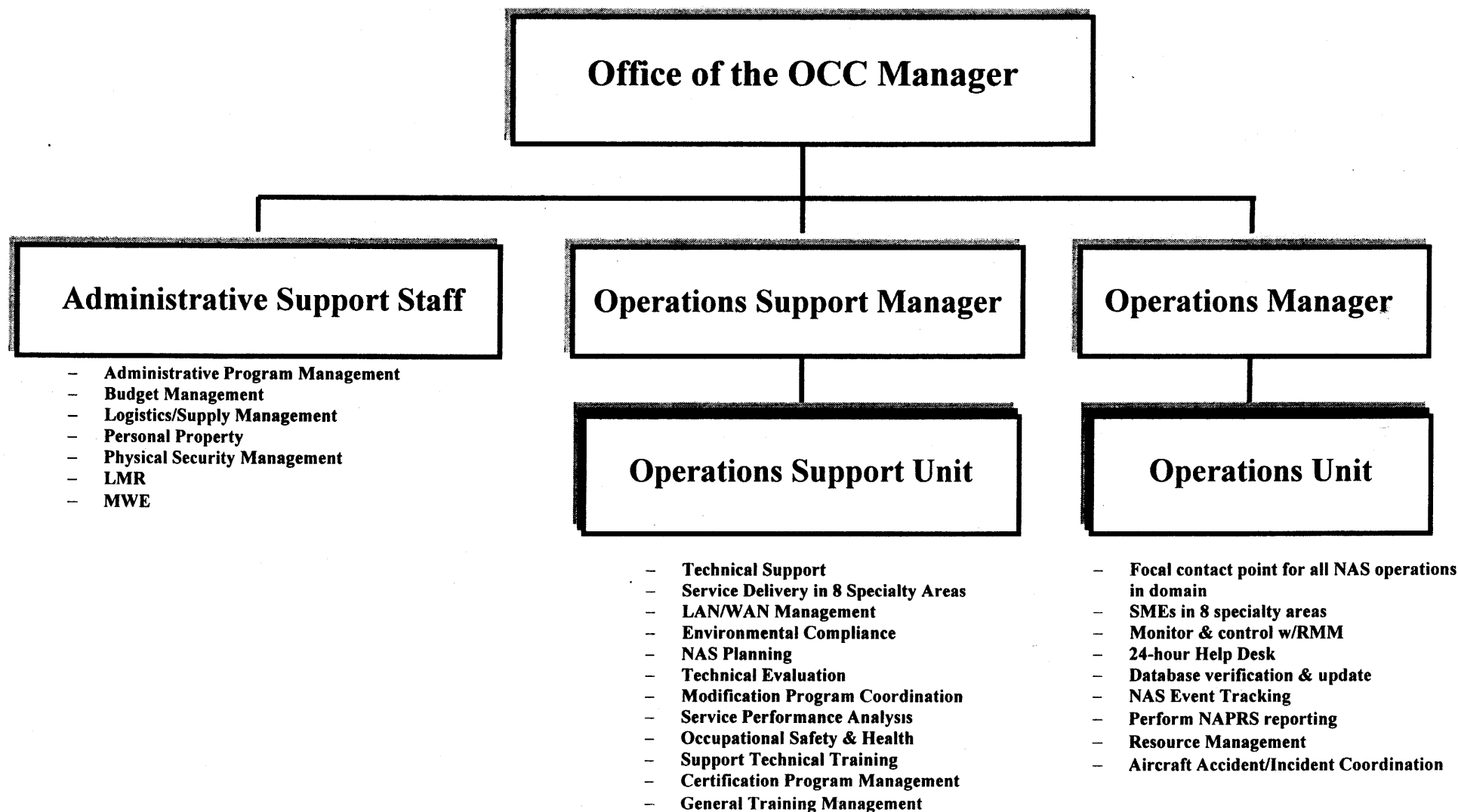


FIGURE 5. STANDARD OPERATIONS CONTROL CENTER

**FIGURE 6. STANDARD OPERATIONS CONTROL CENTER
OFFICE STRUCTURE AND FUNCTIONS**



7 DELEGATION OF AUTHORITY.

a The approval for the standard regional office, SMO, OCC and SSC organization structure and functions are hereby delegated to the Director of Airway Facilities, except for actions explicitly reserved for the Administrator in the latest version of Order 1100.1, FAA Organization-Policies and Standards

b Classification actions impacting the title, pay band levels, and/or series of positions will be accomplished by national career level definitions in accordance with Air Traffic Services, ATS-1, guidance and as directed by the Director of Airway Facilities Service. Regional AF Division Managers are hereby delegated the authority to determine the number and type of positions required to meet the primary AF Regional Office, OCC and SMO mission of providing safe, efficient, and cost effective service to the users

8 RESPONSIBILITIES.

a The Director of Airway Facilities, AAF-1

(1) Establishes the titles, career level definitions, and series of positions to be used in the standard regional AF division organizations

(2) Provides regional AF divisions with final end-of-year employment targets in a timely manner, in order to ensure effective planning and efficient use of AF human resources.

b Regional AF Division responsibilities are identified in Appendix 1, Standard Regional Airway Facilities Division Organizational Structure and Functions

c SMO responsibilities are identified in Appendix 2, System Management Office Organization.

d OCC responsibilities are identified in Appendix 3, Operations Control Center Organization

9. RESOURCE MANAGEMENT PLAN. The regional AF Division shall submit a resource management plan annually. This plan shall be developed, using the criteria established in this order, for each organization within the division. The resource management plan shall be submitted to the Resources Management Director, AFZ-1, for review and approval by the Director of Airway Facilities, AAF-1. The plan shall include, but not limited to the following

a Organization charts

(1) Position titles

(2) Position series

(3) Position location

(4) Position pay band level

b. Employee to supervisory ratio by organization

c. Overhead percentage by organization.

d. Any deviation from the requirements of this order requires a waiver request, as described in paragraph 6e.



Steven J. Brown *for*
Acting Associate Administrator for
Air Traffic Service

APPENDIX 1. STANDARD REGIONAL AIRWAY FACILITIES DIVISION ORGANIZATIONAL STRUCTURE AND FUNCTIONS

- 1. MISSION:** The regional AF Division operates and maintains the National Airspace System (NAS). The Division is under the executive direction of the Director of Airway Facilities, AAF-1.
- 2. SPECIAL RELATIONSHIP.** The regional AF Division Manager shall keep the regional administrator informed of all significant operational and/or political issues within its purview. The regional AF Division shall coordinate with the appropriate organizations within the Airway Facilities Service and Office of the Associate Administrator for Research and Acquisitions for the effective accomplishment of assigned regional program responsibilities.
- 3. STRUCTURE.** The standard organizational structure of the regional AF division is in Figure 1, Standard Airway Facilities Division and may include a Special Assistant.
- 4. FUNCTIONS.** The regional AF Division functions are discussed below and shown in Figure 2.
 - a. Establishes and implements regional policies, procedures, and practices.
 - b. Directs, manages, and administers maintenance and operation of the NAS. Supports ANI expansion and modernization programs.
 - c. Serves as the central contact for all regional FAA facility environmental compliance and employee occupational safety and health programs.
 - d. Conducts regional evaluations of technical program effectiveness to determine assigned program effectiveness and efficiency and directs follow-up actions to all areas that require improvement.
 - e. Develops and implements regional energy management and water conservation programs to ensure compliance with all regulatory mandates.
 - f. Exercises line authority over the Staff, Branch, and SMO organizations. Exercises line authority over the OCC organizations for administrative and performance appraisal purposes. AOP will exercise authority over the OCC organizations for operational purposes.
 - g. Ensures compliance with all configuration management policies, processes, and orders.
 - h. Manages available resources while fostering and supporting a model work environment with the regional workforce.

5. ORGANIZATIONAL ELEMENTS.

a. **The Executive Staff, AXX-410**, is responsible for administrative program management and management/internal evaluation for the regional AF Division. Alternatively, some of these functions may be assigned within the AXX-420 Branch. This includes but not limited to the following:

(1) Developing and maintaining guidelines, standards, and procedures; provides guidance, response to inquiries, and resolution of problems; develop plans and program objectives; and monitors, evaluates, and reports on overall administrative program accomplishment.

(2) Providing direct, specialized staff support to the division management including advice and assistance, coordination, direction, and control of regional AF administrative programs and representation of division management with respect to management concepts, policies, plans, and standards.

(3) Managing the division's goals and executive performance agreements including the division managers' program reviews.

(4) Managing such division programs as the incentives awards, performance appraisals, employee survey activities, and paperwork management, and serves as the division's focal point for the Privacy Act and Freedom of Information Act (FOIA).

(5) Serving as the focal point for all meetings and conferences of the division manager or the assistant division manager. Prepare and distributes conference agenda, establishes action items and follow-up procedures, and prepares the division or assistant division manager's data for national conferences.

(6) Providing overall management and direction for the division in employee involvement and labor/management relations (LMR) activities.

(7) Providing program management for Accountability Board responsibilities.

b. **The Resource Management Branch, AXX-420**, is responsible for region-wide issues concerning training, staffing, financial management, strategic/operations planning, and information resource management. This includes but not limited to the following:

(1) Managing the AF staffing standards and planning, developing, and distributing of staffing allowances.

(4) Managing the AF personnel certification program and non-Federal personnel verification program.

(5) Managing the Model Work Environment.

(6) Managing the AF operations fiscal program.

(7) Managing the facility, service, and equipment profile (FSEP).

(8) Managing the AF drug and alcohol testing program.

(9) Coordinating special emphasis and employee participation group activities.

(10) Planning and coordinating regional administrative space requirements.

(11) Managing the administrative automation activities in AF and AT representing the division in Information Resource Management Plan (IRMP) functions, local area networks, and automation support services for hardware and software.

(12) Serving as liaison with the regional Logistics Division and the AF field organizations for real estate leases, utilities, contracts and procurement activities; also is the division's focal point for the procurement plan.

(13) Managing the regional AF Physical Security Program.

(14) Managing the Emergency Readiness Program.

c. The Operations Branch, AXX-470, provides regional program management and engineering support with respect to the maintenance and operations of Airway Facilities systems, telecommunications, environmental compliance, and facility refurbishment. This includes but is not limited to the following:

(1) Managing the Telecommunications Service Management (TSM), financial management and facility connectivity programs.

(2) Managing the aircraft accident/incident program.

(3) Managing the coordination of matters pertaining to configuration control for assigned systems and equipment including National Change Proposals (NCPs) and modification programs.

(4) Managing the regional frequency spectrum management program.

(5) Managing the non-Federal program.

- (6) Managing the regional AF environmental compliance program.
- (7) Providing field engineering for identification and development of facility projects, IFBE, Enroute Facilities and Buildings Program (EFABS) and Operations Infrastructure programs, including Field Maintenance Party (FMP) in those regions where they exist.
- (8) Managing the regional AF Technical Evaluation Program.
- (9) Managing the Test Equipment Program.
- (10) Managing the Joint Surveillance System (JSS) and Joint Radar Planning Group (JRPG) Programs.
- (11) Managing the Remote Maintenance Monitor (RMM) Program.
- (12) Managing the NAS Performance Reporting Systems (NAPRS) Program.
- (13) Managing the Occupational Safety and Health Administration (OSHA) Program.
- (14) Managing Obstruction Evaluations (OE) Program.
- (15) Providing regional program management support for the NAS Modernization Program.
- (16) Serving as regional focal point for NAS Implementation requirements and the NAS Infrastructure Program.

d. Operations Control Centers (OCC) are located in Southern Region (Atlantic OCC), Central Region (Mid States OCC), and Western Pacific Region (Pacific OCC). Atlantic OCC domain encompasses Southern, Eastern, and New England Regions; Mid States OCC domain encompasses Central, Great Lakes, and Southwest Regions; Pacific OCC domain encompasses Western Pacific, Northwest Mountain, and Alaska Regions.

- (1) OCCs provide NAS status information to the Divisions and SMOs within their domain and to the National Operations Control Center (NOCC).
- (2) They will serve as the focal contact point for non-ARTCC/Large TRACON facility restoration activities.
- (3) The OCC Manager reports administratively (receives performance appraisal and budget oversight, etc.) to the host regional Airway Facilities Division Manager with input from all three Airway Facilities Division Managers within their respective domains.
- (4) The OCC Manager receives technical/Operational direction from AOP-1.

APPENDIX 2. STANDARD SYSTEM MANAGEMENT OFFICE ORGANIZATION

1. **MISSION.** The System Management Office (SMO) manages the NAS Infrastructure, ensures the delivery of NAS services, operates and maintains all NAS facilities, ensures that performance is within established tolerances of accuracy, meets operational requirements of availability and reliability to NAS users, supports the expansion and modernization of the NAS, and efficiently and effectively manages available resources.

2. **STRUCTURE.** The standard organizational structure for a SMO is shown in Figure 3, Standard Airway Facilities System Management Office. Facility Managers are allowed as an additional level of management at high NAS impact locations.

a. SMOs should be organized towards 200 full time (FTP) positions (regional average) with no less than 78 percent allocated to DSR positions.

b. The supervisory ratio shall be established to provide adequate quality assurance and reflect cost effective business management practices. AF previously had a 6:1 employee to supervisor ratio and has moved well beyond that to provide more direct safety related positions for operation of the NAS. As further improvements to technology are implemented and as improvements are made to administrative business process reengineering practices, additional changes to the employee to supervisor ratio will be possible.

c. Field engineering functional responsibility is transferred from the SMOs to the Operations Branch, AXX-470. Each SMO may retain sufficient engineering positions to support the NAS and Improve Facilities, Buildings, and Equipment (IFBE) programs.

3. **FUNCTIONS.** The System Management Office functions are discussed below and shown in Figure 4.

a. Implements regional policies, procedures, and practices.

b. Directs, manages, and administers maintenance and operation of the NAS. Supports ANI expansion and modernization programs.

c. Implements environmental compliance and employee occupational safety and health programs.

d. Ensures NAS services that meet operational requirements are provided to the users.

e. Manages available resources including workforce, budget, and material.

f. Fosters and supports a model work environment with the SMO workforce.

g. Ensures compliance with national and regional security directives and guidelines within the SMO facilities.

4. ORGANIZATIONAL ELEMENTS.

a. **Program Support Unite (PSU)** is responsible for administering regional and SMO programs concerning training, staffing, financial management, security, and information resource management. This includes but is not limited to:

- (1) Managing the SMO staffing standards, Facilities, Services, and Equipment Profile (FSEP), and planning, developing, and distributing of staffing allowances.
- (2) Managing the SMO human resources programs including Labor Management Relations (LMR) and Model Work Environment (MWE).
- (3) Managing the SMO technical and non-technical training program.
- (4) Managing the SMO personnel certification program.
- (5) Managing the SMO operations fiscal program.
- (6) Managing the SMO drug and alcohol testing program.
- (7) Managing the administrative automation activities and IRM functions.
- (8) Managing logistics programs to include procurement, leases, materiel, real estate, utilities.
- (9) Managing the SMO AF physical security program.
- (10) Managing Environmental Compliance and Health/Safety programs.

b. **The Technical Support Unit (TSU)** provides program management with respect to the maintenance and operation of AF systems, telecommunications, and facilities refurbishment. This includes but is not limited to:

- (1) Telecommunications Service Management (TSM) and facility connectivity.
- (2) Serving as focal point for the coordination on matters pertaining to configuration control for assigned systems and equipment including National Change Proposals (NCPs) and modification programs.

- (3) Spectrum management.
- (4) Non-Federal program.
- (5) Implementing IFBE program, Sustain, Operations Infrastructure, EFABS and SMO projects.
- (6) Test Equipment Program.
- (7) Joint Surveillance System (JSS).
- (8) Remote Maintenance Monitoring (RMM) Program.
- (9) NAS Performance Reporting Systems (NAPRS).
- (10) Providing engineering/technical support for communications, surveillance, NAVAIDS, automation, weather, and environmental.
- (11) NAS Modernization Program.
- (12) Responsible for analysis of NAS performance.

c. **Facility Managers** provide management oversight of NAS maintenance/operations at ARTCC, selected large TRACON and high-density locations with significant NAS impact. The Director of Airway Facilities may also add additional locations based on high visibility, politically sensitive or special operational requirements.

d. **Service Operations Centers (SOC)** are located in ARTCCs and selected Large TRACONs. SOC's serve as the focal point for all assigned NAS systems and services related to that facility following the operating procedures in the NAS Infrastructure Management (NIM) environment. This includes but is not limited to:

- (1) Coordination of scheduled event.
- (2) Coordination during unscheduled event.
- (3) Coordination of Flight Inspection (FI).
- (4) Coordination of Radio Frequency Interference (RFI).
- (5) Coordinates post-aircraft accident and incident activities as requested by the Regional AFAAR.

(6) Remote maintenance monitoring (RMM).

(7) Certification of Services.

e. **System Support Centers (SSC)** operate, maintain, and restore the NAS. This includes but is not limited to:

(1) Responsible for management of the NAS including the maintenance, modification, and restoration.

(2) Responsible for certification of the NAS and supporting the verification of non-Federal maintenance activities.

(3) Responsible for post aircraft accident/incident investigation and certification of equipment as directed by the Airway Facilities Aircraft Accident Representative (AFAAR).

(4) Responsible for facility safety, security and appearance.

(5) Responsible for NAS documentation.

(6) Responsible for supporting the analysis of NAS performance.

(7) Responsible for supporting NAS modernization.

(8) Responsible for assigned resources and logistics program accomplishments.

(9) Responsible for carrying out administrative programs including drug and alcohol testing, LMR, and Model Work Environment.

(10) Responsible for carrying out training and development activities.

(11) Responsible for utilization of Remote Maintenance Monitoring (RMM).

APPENDIX 3. STANDARD OPERATIONS CONTROL CENTER ORGANIZATIONAL STRUCTURE AND FUNCTIONS

1. **MISSION.** The Operations Control Centers (OCC) provides NAS status information to the regional Divisions and the SMOs within their domain and to the National Operations Control Center (NOCC). The OCC will serve as the focal contact point for non-SOCs (located at ARTCC/selected Large Terminal Radar Approach Control (TRACON)) NAS operations.

2. **STRUCTURE.** The OCCs are located in Southern Region (Atlantic OCC), Central Region (Mid States OCC), and Western-Pacific Region (Pacific OCC) (Figure 5). Atlantic OCC domain encompasses Southern, Eastern, and New England Regions; Mid States OCC domain encompasses Central, Great Lakes, and Southwest Regions; Pacific OCC domain encompasses Western Pacific, Northwest Mountain, and Alaska Regions. The OCC Manager reports administratively (receives performance appraisal and budget oversight, etc.) to the host regional Airway Facilities Division Manager with input from all three Airway Facilities Division Managers within their respective domains. The OCC Manager receives technical/operational direction from NAS Operations, AOP-1.

a. OCCs should be organized with approximately 22 percent of staffing being limited to overhead positions.

b. The supervisory ratio shall provide adequate quality assurance and reflect cost-effective business management practices. As further improvements to technology are implemented and as improvements are made to administrative process reengineering practices, additional changes to the employee and supervisor ratio will be possible.

3. **FUNCTIONS.** The OCC functions are discussed below and shown in Figure 6.

a. Serves as the focal contact and coordination point for all NAS Operations in the domain for non-SOCs.

b. Operations support and service delivery in the eight specialty areas (Communications, Navigation/Landing, Automation, Weather, Telecommunications, Surveillance, Environmental/Visual Aids and Enroute Systems.)

c. Monitor and control through the analysis of read time system status information and operation of remote controls.

d. 24-hour Help Desk with customer service focus.

e. Coordinates resources across regional boundaries in response to immediate needs of the NAS.

f. Provides a high level of customer service by supporting regional organizations within the OCC domain.

g. Communication of NAS status on a real time basis.

4. ORGANIZATIONAL ELEMENTS.

a. The **Operations Support Unit** is responsible for OCC-wide program support. This includes but is not limited to the following:

- (1) Providing technical training/certification program and operational procedures.
- (2) Managing Information Technology.
- (3) Providing NAS service quality performance analysis.
- (4) Confirming RMM capability/functionality prior to Joint Acceptance Inspection (JAI).
- (5) Developing operational agreements as required.
- (6) Coordinating non-FAA restoration activities.

b. The Operations Unit provides 24-hour, seven day week coverage to meet the responsibilities that include but are not limited to the following:

- (1) Providing NAS status reporting.
- (2) Coordinating scheduled NAS events.
- (3) Coordinating response to unscheduled NAS events.
- (4) Coordinating flight inspections.
- (5) Coordinating response to Radio Frequency Interference (RFI).
- (6) Using RMM to monitor, control, restore and remotely certify services.
- (7) Communication of NAS status to SMO, Regional and National operational organizations.
- (8) Coordinating post-aircraft accident and/or incident events.

(9) Serving as the single point of contact for event notification for service users and customers.

(10) Assisting field specialists in obtaining needed resources (e.g., special test equipment, parts, etc.).

c. The Administrative Staff includes but is not limited to:

(1) Implementing administrative regional policies, procedures, and practices in the host region.

(2) Managing logistics programs to include procurement, personal property, leases, materiel and utilities.

(3) Tracking and coordinating the OCC budget.

(4) Administering the human resource programs including LMR and MWE.

(5) Serving as focal point for the OCC's Physical Security program.

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